

## **CITY OF VAUGHAN**

### **EXTRACT FROM COUNCIL MEETING MINUTES OF MARCH 24, 2015**

Item 2, Report No. 6, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on March 24, 2015.

## **2        2015 DRAFT WATER AND WASTEWATER/STORMWATER OPERATING BUDGETS           AND THE 2016-2018 PLAN**

**The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Commissioner of Finance & City Treasurer, the Commissioner of Public Works, the Director of Environmental Services and the Director of Financial Services and Deputy Treasurer, dated March 2, 2015:**

### **Recommendation**

The Commissioner of Finance & City Treasurer, the Commissioner of Public Works, the Director of Environmental Services and the Director of Financial Services and Deputy Treasurer recommend:

1. That the draft 2015 budget including rate increases for Water and Wastewater reflecting the Regional Rate increase, City operating and City capital requirements be considered as follows:
  - (a) That the City's water rate be increased from \$1.4075 to \$1.4780 per cubic meter effective after Council approval;
  - (b) That the City's wastewater rate be increased from \$1.6781 to \$1.9130 per cubic meter effective after Council approval;
2. That the Additional Resource Request (ARR) Staffing Requests to support the water and wastewater field staff as outlined in Attachment 2 be considered;
3. That the service charges for water and wastewater as outlined in Attachment 7 be considered;
4. That any necessary By-laws to give effect to the water and wastewater rates and service charges be implemented in the billing cycle after budget approval;
5. That should Committee endorse recommendations 1, 2, 3 and 4, the City Clerk be directed to schedule a Special Council evening meeting, advertised in advance and consistent with the City's public notification by-law to consider approval of the proposed 2015 Water and Wastewater Budget and 2016-2018 Plan and related matters; and
6. That a consolidated item on the proposed 2015 Water and Wastewater Budget and 2016-2018 Plan be submitted to a Special Council meeting, incorporating any further adjustments and/or direction provided by the Finance, Administration and Audit Committee.

### **Contribution to Sustainability**

Safe drinking water, effective wastewater collection and stormwater management are cornerstones of a sustainable and healthy community.

The draft 2015 water and wastewater/stormwater budgets and rates provide funds to support the City's water, wastewater and stormwater systems by moving towards financial sustainability in accordance with the Safe Drinking Water Act and the Sustainable Water and Sewage Systems Act.

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Continued infrastructure renewal investment is critical to ensure water and wastewater systems are sustainable in the future. This objective is supported by continuing to build City reserves.

#### **Economic Impact**

The City's draft 2015 water and wastewater combined rate will be the lowest in the Region of York.

For 2015, the draft combined rate increase for Water and Wastewater/Stormwater is \$0.3053 per cubic meter or 9.9%. This results in a new rate of \$3.391 per cubic meter. The Region's share of the rate is 64.2% versus 35.8% for the City.

Combined Draft Rate Increase		
	% of Rate	% of Rate Increase
Region	64.2%	6.4%
City	35.8%	3.5%
Total	100%	9.9%

For 2015, the City's share of the combined draft water/wastewater rate increase is 3.54% (or 35.8%) and the Region of York's share for water purchases and wastewater services is 6.35% (or 64.2%) resulting in a combined rate increase of 9.90%. Based on the draft rate increase for water and wastewater the impact to the ratepayer that consumes 300 cubic metres will be approximately \$91.59 or \$7.63 per month.

The budgeted rates will generate a net contribution of \$12.8 million to their respective reserves providing funds to support and move towards a financially sustainable water and wastewater system as required by the Safe Drinking Water Act (SDWA) and Sustainable Water and Sewage Systems Act.

#### **Communications Plan**

The notice for this report has been advertised using the City's 2015 Budget Communication Plan and tools, presented on January 12, 2015.

#### **Final Opportunity for Community Input**

In addition to the meeting of the Finance, Administration and Audit Committee, a Special Council Meeting will also be held before budget approval to provide the public with a final opportunity to comment on the proposed 2015 Budget and 2016-2018 Plan. This meeting is anticipated to be held in late March or early April and will be advertised in advance, consistent with the City's public notification by-law, once a date has been set.

#### **Post Budget Approval Communication**

Following approval of a budget, the City will communicate budget highlights by employing a variety of tactics, including a media release, website content, social media messages, a blog, an eNewsletter post and an internal message to staff. Staff will provide a list of questions and answers to the Corporate Communications department to assist in responding to the public and the media.

#### **Purpose**

The purpose of this report is to provide and present the 2015 Draft Water and Wastewater/Stormwater Operating Budgets, The 2016 – 2018 Plan and the corresponding draft water and wastewater billing rates to the Finance, Administration and Audit Committee for consideration.

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**Background – Analysis and Options**

**Water, Wastewater and Stormwater are regulated services and must meet legislated requirements of the Safe Drinking Water Act and the Sustainable Water and Sewage Systems Act.**

**The Safe Drinking Water Act**

The SDWA expands on existing policy and practices and introduces new regulations to protect drinking water. It includes certification of drinking water system operators and analysts and puts in place certain financial reporting requirements and the need for municipalities to develop financially sustainable water treatment and distribution systems. The Act's purpose is to protect human health through the control and regulation of drinking water systems and drinking water testing.

It should be noted that the City currently has a strong balance sheet and has a financially viable and sustainable drinking water financial plan that meets the needs of Ontario regulation 453/07 as noted in the "Six Year Water Financial Plan (2014-2019)" presented to Council on December 2, 2013.

**The Sustainable Water and Sewage Systems Act**

The Sustainable Water and Sewage Systems Act legislates municipalities to assess the costs of providing water and sewage utilities and prepare a method to finance the full cost of providing these services

**From a financial planning perspective the city must plan and budget for three separate time horizons, upcoming draft budget year, six year financial plan and a long term (multi-decade) plan**

The upcoming budget year plan must cover the Region's water and wastewater service purchases, the City's operational costs and contributions to reserves. The six year financial plan is regulated by legislation and considers future operating and capital programs. The long term plan must also consider long term financial needs with respect to repairing and replacing infrastructure.

**Financial planning consists of identifying expenses, revenue and generating water and wastewater/stormwater rate.**

The 2015 budget was developed by identifying expenses (Region purchases, City operating costs and contributions to reserves), examining revenue (through the analysis of water consumption patterns and projected revenue associated with the sales) and rate generation. This report follows this format.

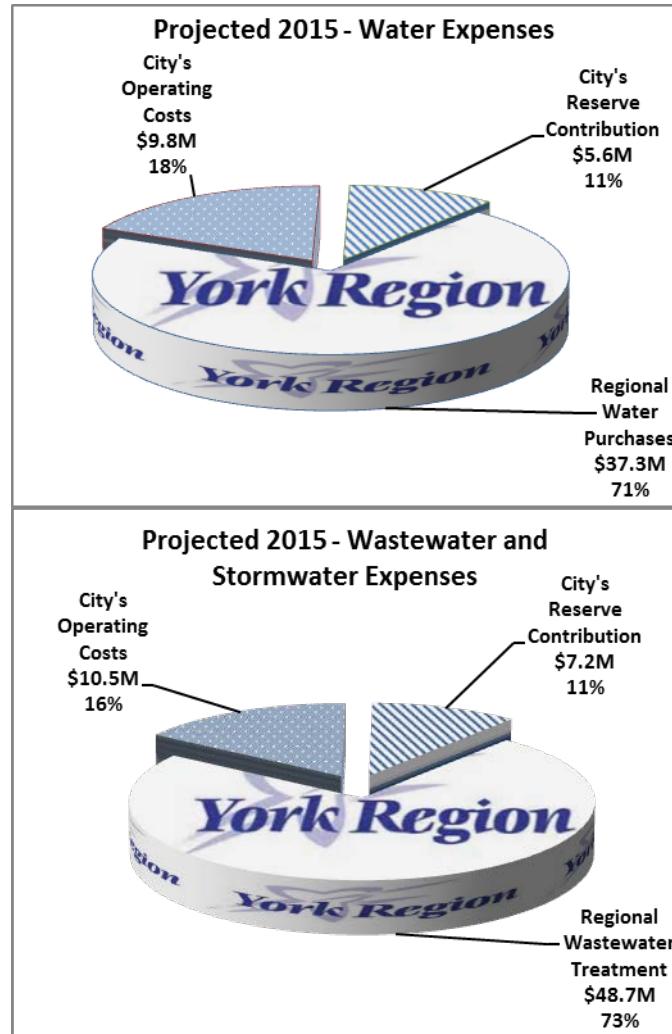
**Water, Wastewater/Stormwater Cost Impacts**

**The following graphs depict the three major cost components that are explained below: the purchased cost of water from the Region, the City's operating costs and contribution to repair and replace the water and wastewater/stormwater systems.**

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**The purchase of potable water, and wastewater services from the Region represents, by far, the largest budget expense.**

#### Water

The City purchases bulk water from the Region for distribution to the City's residents and businesses. These bulk water purchase costs represent approximately 71% of the City's costs annually and therefore are a critical rate driver. The 2015 rate increase for water provided by the Region is 7.45%. The anticipated annual increase in the Region's bulk water costs for the period of 2016 to 2018 is 9% annually. The Region's forecasted rate has been incorporated into the City's forecasted rate.

Included in the bulk water purchased from the Region is the unmetered (non-revenue) water consumption. The 2015 budget for unmetered water is at 13% maintaining the same level as in the past few years. The non-revenue water (NRW) can be broken down as: apparent losses – customer meter degradation, real losses – leakage on mains, service connections, unbilled consumption – fire suppression, main flushing and maintenance, etc. To attempt to minimize NRW, the City, in partnership with York Region, will be undertaking a leak detection program. This program will help to further identify potential sources of water loss in underground infrastructure.

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##### Wastewater

The City pays the Region to convey and treat the City's Wastewater. These conveyance and treatment costs represent approximately 73% of the City's costs annually and therefore are a critical rate driver. The 2015 rate increase for wastewater provided by the Region is 12%. The anticipated annual increase in the Region's wastewater service costs for the period of 2016 to 2018 is 9% annually. The Region's forecasted rate has been incorporated into the City's forecasted rate.

**The City's cost for these Regional services will be subject to further adjustments arising from the Region's 2015 rate review.**

The Region of York has advised the City of Vaughan that it will be conducting a rate review which will determine rates for future years. Pending the results of this rate review, the Region has supplied the City with a flat rate of 9% for both water and wastewater rates to be used in the City's forecast. The results of this study will have a substantial impact on the City's future rates and the forecasted rates in the budget are subject to change.

Taking into account the significant impact that the studies noted above will have on future rates, staff may not be able to fully assess the impacts and develop a strategy forward until at least 2016. Since the results of the studies above are not yet known, the budgets have been built based on current information.

##### Water

As mentioned previously, the Safe Drinking Water Act requires all municipalities to develop a consolidated six year financial plan which is sustainable and financially viable. The City of Vaughan ensures that we meet this obligation with each budget cycle. As more infrastructure is assumed water operating costs increase. Also, inflationary increases from existing operational contracts and agreements are factored into the budget. Increases in maintenance, administration, additional staffing resources and other expenditures reflect inflation, union agreements and changes in operational requirements. One ARR has been added to the 2015 budget: Supervisor, Water Operations will provide direction and leadership ensuring effective management of field staff and contractors.

The new 2015 operational initiatives, the contract cost increases and salary inflationary increases amount to \$247K.

##### Wastewater/Stormwater

The Wastewater/Stormwater budget is also governed by legislature – the Sustainable Water and Sewage Systems Act. The City of Vaughan is devising a method to finance the full cost of providing wastewater/stormwater services by emulating the Water six year plan.

As with water, inflationary increases from contracts and agreements, maintenance and administration were also factored into the budget. A new inspection program for storm and sanitary sewer pipes will provide condition data for asset management purposes and reduce risk. One ARR has been added to 2015: Supervisor, Wastewater/Stormwater Operations will provide direction and leadership ensuring effective management of field staff and contractors. The new 2015 operational initiatives, the contract cost increases, and salary inflationary increases amount to \$776K.

**Prudent financial planning requires ongoing contribution to Water and Wastewater Reserves to fund repair and replacement of the water and wastewater infrastructure**

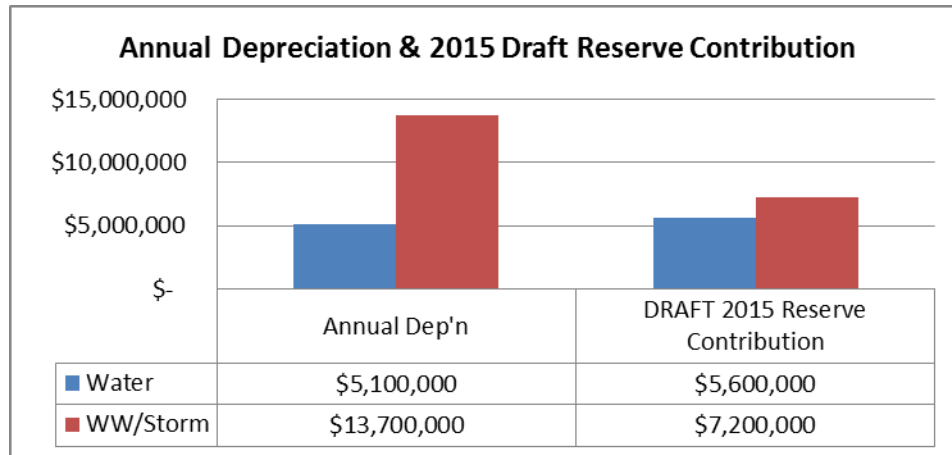
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Using annual depreciation as a basis for reserve funding is a best practice according to the National Guide to Sustainable Municipal Infrastructure. "It is best practice to use the funds generated from depreciation charges on infrastructure investments to finance past, current or future infrastructure investments."<sup>1</sup>

The following table illustrates annual depreciation of water and wastewater assets.



#### Water

The City of Vaughan has invested \$420 million (replacement value, Corporate Asset Management Strategy, 2014) into its water infrastructure. The water infrastructure is depreciating by \$5.1 million per year. To cover the annual depreciation, the City needs to continue to contribute at least \$5.1 million to the water reserves. The 2015 budget contributes \$5.6 million to the reserves in 2015. This will not only cover the annual depreciation but start to address future capital needs.

To meet the requirements of the Safe Drinking Water Act, the forecasted six year financial plan has also been addressed through the forecasted 2016 to 2018 water rates (four year plan, as required by the 2015 budget process). The forecasted 2016 to 2018 contribution increase rate of approximately 7.5% annually will provide \$6.1 million, \$7.2 million and \$8.2 million, respectively to the reserves

#### Wastewater

The City of Vaughan has invested \$553 million (replacement value, Corporate Asset Management Strategy, 2014) into its wastewater infrastructure. The wastewater infrastructure is depreciating by \$13.7 million per year. To cover the annual depreciation, the City needs to contribute at least \$13.7 million to the wastewater reserves. The 2015 budget contribute \$7.2 million to the reserves in 2015. This will not cover the annual depreciation for 2015, however the 2016 to 2018 forecast will start to meet annual depreciation of wastewater assets.

To meet the requirements of the Sustainable Water and Sewage Systems Act, the forecasted six year financial plan has also been addressed through the forecasted 2016 to 2018 wastewater rates (four year plan, as required by the 2015 budget process). The forecasted 2016 to 2018 rates of approximately 12% annually will provide \$11 million, \$15.7 million and \$20.8 million, respectively to the reserves. The wastewater rate will meet annual depreciation costs in 2017 and start to build the reserve to meet future wastewater infrastructure needs.

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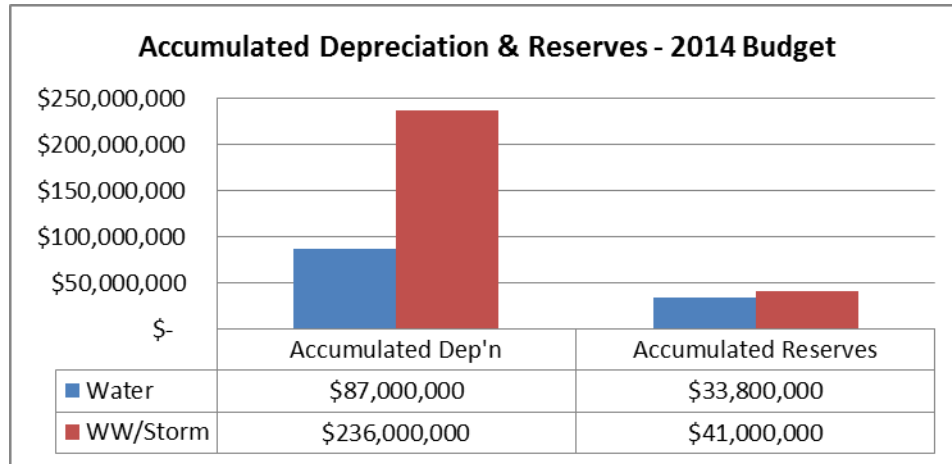
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In summary, the planned 2015 water reserve contribution will exceed annual water depreciation value. The wastewater reserve contribution will not meet this in 2015, however, the projected contribution rate increases will ensure annual wastewater depreciation is exceeded by 2017. Exceeding the annual depreciation charges is vital to ensuring the City meets its long term financial requirements and recover past contributions which should have occurred.

#### **Long term financial planning requires that the City address accumulated depreciation and asset management requirements**

The following table illustrates the City's water and wastewater assets accumulated depreciation and the reserves which are used to replace future water and wastewater infrastructure needs. Accumulated depreciation is the total depreciation of the City's assets since they were built. Another aspect of prudent financial planning is to save enough money in the City's reserves to cover the value of the accumulated depreciation.

The following table clearly depicts a reserve deficit for both water and wastewater infrastructure.



**Contributing at a rate which will cover the City's accumulated depreciation will also move the City towards meeting long term asset management requirements**

#### Water

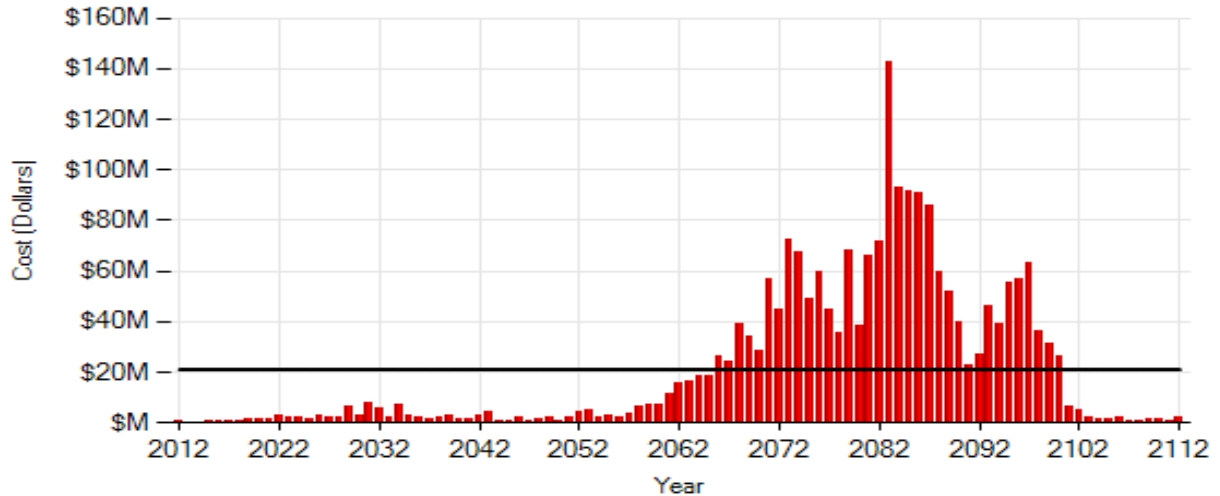
The Corporate Asset Management Strategy (2014) identified water infrastructure needs starting in 2030, with approximately \$10 million identified, with significant water infrastructure needs identified in the 2070's and 2080's at approximately \$70 million and \$140 million, respectively as shown in the graph below:

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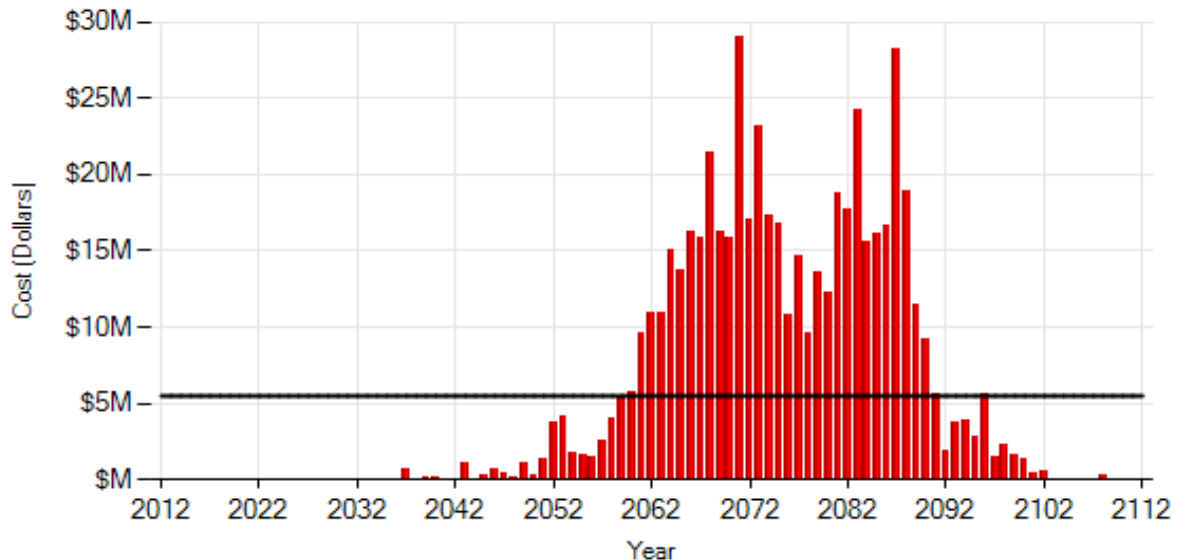
Future Investment, Water Services, (2012\$)



Wastewater/Stormwater

The Corporate Asset Management Strategy (2014) identified wastewater infrastructure needs starting in 2060, with approximately \$5 million identified, with significant wastewater infrastructure needs identified in the 2070's and 2080's at approximately \$29 million and \$28 million, respectively as shown in the graph below:

Future Investment, Wastewater Services, (2012\$)



The city is continuing to update its asset data and will be formulating an integrated asset management funding strategy and the water and wastewater/stormwater plans will be refined accordingly. Stormwater data will be incorporated in the current infrastructure funding study.



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At the projected reserve contribution rates the City's long-term financial needs would be fully addressed in a 30 to 50 year horizon. City staff continues to study alternate reserve and investment scenarios, and new revenue/funding opportunities and these will be the subject of future reports to Council.

#### **Water and Wastewater/Stormwater Revenue**

**The City covers all costs of delivering water and wastewater services through rates**

##### Water

The cost of delivering water services is fully recovered through billing from metered water users. For budgeting purposes, the total cost of delivering water services is divided by the projected number of cubic metres of water sold to the City's account holders and billed on a projected water usage basis.

##### Wastewater/Stormwater

The cost of delivering wastewater/stormwater services is also fully recovered through billing from metered water users. For budgeting purposes, the total cost of delivering wastewater/stormwater services is divided by the projected number of cubic metres of water sold to the City's account holders and billed.

The calculation of the wastewater rate based on water usage is a common practice in the industry.

**The 2015 consumption volume is conservatively estimated and is developed based on current consumption patterns, annual growth estimates and does not reflect any weather predictions.**

The volume of wastewater is not metered and therefore the wastewater consumption volume is billed in accordance with water volumes.

**Decreasing consumption and changing weather patterns will cause water and wastewater rates to increase**

The City of Vaughan is experiencing a downward trend in consumption per account due to conservation efforts and changing weather. Lower consumption per account will put upward pressure on rates in order to cover fixed costs and annual depreciation charges in order to contribute adequately to reserve funding.

<b>AVERAGE 2013-2014</b>	<b>% New Accounts</b>	<b>Consumption Per Account</b>
<b>WATER</b>		
Residential	1.10%	-5.13%
Commercial	1.40%	-3.13%
<b>WASTEWATER</b>		
Residential	1.15%	-5.09%
Commercial	1.56%	-4.38%

Generally speaking, infrastructure needs will not decrease with lower per account consumption. Thus, users will pay more for water and wastewater services, although they are using less water.

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#### **2015 Water and Wastewater Rates**

**Rates are set to meet Region of York purchases legislative requirements, operational needs and reserve contributions. The 2015 budget and 2016 to 2018 forecast focusses on meeting these requirements and building reserves**

As discussed previously, the water rates are sufficient to meet the requirements of the Safe Drinking Water Act, which includes contribution to reserves.

The wastewater rates will be required to contribute significantly to reserves as there is a large deficit in wastewater reserves

**The draft 2015 rates will result in an annual residential impact of \$ 91.59 per year based on an annual consumption of 300 cubic metres**

Based on the draft rate increase for water and wastewater the impact to the ratepayer who consumes 300 cubic metres will be approximately \$91.59 or \$7.63 per month.

The draft 2015 recommended rates are:

- Water - \$1.4780 per cubic meter
- Wastewater - \$1.9130 per cubic meter
- Combined - \$3.3910 per cubic meter

Residential customers will see a combined increase of \$0.3053 per cubic meter or \$91.59 per annum based on an annual consumption of 300 cubic metres. The City's consumption rates continue to be competitive as demonstrated on Attachment No. 3.

#### **Relationship to Vaughan Vision 2020**

The 2015 draft water and wastewater/stormwater budget and 2016 – 2018 forecast establishes the budget and resources required to maintain service levels and undertake Council priorities in this area. The budget will promote community safety, health and wellness, managing corporate assets and ensure financial sustainability.

#### **Regional Implications**

There are no implications however, the Regional purchases for 2015 represents 74% of the City's combined costs.

The Region of York is undertaking a rate study in 2015 which will have impact on the City of Vaughan's forecasted 2016-2018 rate projections.

The Region rates come into effect on April 1 and it would be prudent for the City of Vaughan rates to align with this timing to ensure we can recover the increases associated with York Region.

#### **Conclusion**

The combined draft rate increase at 9.9% covers a 10% rate increase from the Region of York, which accounts for 74% of the City's expenses. These rate increases are necessary to ensure that sufficient reserves will be available for future infrastructure replacement.

The 2015 draft water/wastewater/stormwater budgets will generate funds to support operations and move towards full cost recovery thereby meeting the Safe Drinking Water Act and Sustainable Water and Sewage System requirements.

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Based on the draft rate increase for water and wastewater the impact to the ratepayer that consumes 300 cubic metres will be approximately \$91.59 or \$7.63 per month.

It is therefore recommended that the City's water rate be increased to \$1.4780 per cubic meter and that the wastewater rate be increased to \$1.9130 per cubic meter both effective April 2015.

**Attachments**

1. 2015 Draft Operating Water and Wastewater/Stormwater Budgets
2. The 2015 Water and Wastewater/Stormwater ARR Staffing Requests
3. 2015 Water and Wastewater Municipal Rate Comparison
4. Water, Wastewater & Stormwater 2015 Business Plan
5. 2016-2018 Plan
6. Approved 2015 Capital Budgets and 2016-2018 Capital Plans
7. 2015 Draft Operating Budget Water and Wastewater Charge Amendments

**Report prepared by:**

Dean Ferraro CPA, CA  
Director of Financial Services & Deputy Treasurer, Ext. 8272

Jennifer Rose  
Director of Environmental Services, Ext. 6116

Carey Greenidge, CMA,  
Finance Manager, Ext. 8486

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)